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10/602,557	06/24/2003	Thomas A. Makowski	5150-81100	1251

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EXAMINER

DAO, THUY CHAN

ART UNIT

PAPER NUMBER

2192

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/602,557

Applicant(s)

MAKOWSKI ET AL.

Examiner

Thuy Dao

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2008 and 03 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 26-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to the amendment filed on October 20, 2008 and the supplemental amendment filed on December 3, 2008.
2. Claims 1-18 and 26-28 have been examined.

Declaration Per CFR 1.132

3. The Declaration per CFR 1.132 filed October 20, 2008 has been considered and accepted. The Declaration has been filed by Deborah E. Bryant, an employee of National Instruments Corporation (the publisher of LabVIEW '98), who is working in the LabVIEW group and is familiar with the LabVIEW.TM. product, including the version described in the LabVIEW Function and VI Reference Manual, January 1998 Edition (the currently applied reference LabVIEW '98).

Response to Arguments

4. Both amendments filed October 20 and December 3, 2008 have the same arguments. The examiner would like to response to the Supplemental Amendments filed December 3, 2008 (hereafter "Remarks"), which has the summary of Telephone Interview and is more up-to-date.

a) Independent claims 1, 27 and 28 (Remarks, pp. 2-4):

Claim 1 is the representative claim (Remarks, page 4).

As declared by Deborah E. Bryant in the Declaration, page 1, paragraph 3,

"...The node palettes disclosed on pp.33-1 and 33-19 of LabVIEW '98 display a plurality of (VISA) function nodes, and a single generic property node, denoted by a wrench symbol displayed on the property node icon, where the property node is generic to, and may be used to access properties of, any LabVIEW function nodes that have properties. The node palette of p. 51-1 of LabVIEW '98 displays a plurality of (ActiveX) function nodes, and a single generic property node, denoted by a wrench symbol displayed on the property node icon, where the property node is

generic to, and may be used to access properties of, any LabVIEW function nodes that have properties. More generally, in 1998 LabVIEW did not include multiple types of property nodes corresponding to different function nodes, but rather utilized a single generic property node for use with any LabVIEW function nodes that have properties." (emphasis added).

After further consideration, the examiner notes that the plain language of claim merely calls for *"a second plurality of property nodes displayed in the display window, wherein each property node corresponds to a respective one of at least a subset of the plurality of function nodes, wherein each property node is displayed proximate to said respective one of the at least a subset of the plurality of function nodes"* (e.g., claim 1, lines 12-15), which does not exclude teachings of LabVIEW '98, for example:

Page 12-1, property node 1 with a wrench symbol-1 (Property node of Application control functions) is displayed under/corresponds to sub palette Application Control – via selecting Functions>> Application Control)

Page 33-1 and 33-19, property node 2 with a wrench symbol-2 (Property node of VISA functions) is displayed under/corresponds to sub palette VISA – via selecting Functions>> Instrument I/O>> VISA); and

Page 51-1 and 51-3, property node 3 with a wrench symbol-3 (Property node of ActiveX\OLE functions) displayed under/corresponds to sub palette ActiveX\OLE – via selecting Functions>> Communications>> ActiveX\OLE); and

Page 1-2, wherein the palette Functions (the display window) displays palettes Application control functions (pages 1-7 and 12-1), Instrument I/O functions (pages 1-5 and 33-1) and Communication functions (pages 1-5 and 51-1).

In another word, generic property nodes in sub palettes illustrated in pages 12-1, 33-1 and 51-1 with wrench symbols can be used to access properties of at least three illustrated function nodes (Application Control function nodes, VISA function nodes and ActiveX\OLE function nodes), which correspond to three different subsets of the plurality

of function nodes in palette Functions - see page 1-2. Thus, it certainly would be apparent to one skilled in the art to implement as one generic or three property nodes such as Property node of Application control functions (wrench symbol-1), Property node of Instrument I/O VISA functions (wrench symbol-2) and Property node of ActiveX/OLE functions (wrench symbol-3) correspond to the respective one of the function nodes as noted above.

Independent claims 27 and 28 include similar limitations as claim 1 and are also rejected with the same response/ground of rejection.

b) Dependent claim 4 (Remarks, pp. 5-6):

The examiner respectfully disagrees with Applicants' assertions. The plain language of the claim recites *"the first plurality of function nodes are organized in the display window in accordance with one or more of: order of use in a typical graphical program development session; frequency of use in a typical graphical program development session; or functional relationships among the first plurality of function nodes"* (emphasis added).

Per the claim language ("one or more of"), LabVIEW explicitly teaches *the first plurality of function nodes are organized in the display window in accordance with ... functional relationships among the first plurality of function nodes* (e.g., page 1-2, Functions are classified/displayed as Structures, Instrument I/O, DAG ...; page 33-1, Instrument I/O VISA functions classified/displayed as Event Handling functions or Serial functions).

c) Dependent claim 7 (Remarks, page 6):

The examiner respectfully disagrees with Applicants' assertions. LabVIEW explicitly teaches *the two or more of the channel creation node, the read node, and the write node comprise a primary set of function nodes* (e.g., page 33-4, Easy VISA Read and Easy VISA Serial Write and Read function nodes; page 33-5, Easy VISA Write and

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Read and Easy VISA Write function nodes; page 33-1, VISA read/write nodes comprise a primary set of Instrument I/O VISA function nodes).

d) Dependent claim 9 (Remarks, pp. 6-7):

The examiner respectfully disagrees with Applicants' assertions. LabVIEW explicitly teaches:

the one or more of the timing node, the triggering node, the start node, the stop node, and the clear node comprise a secondary set of function nodes (e.g., page 10-2 Timing function node, 12-6, Stop function nodes); and

wherein the primary set of function nodes and the secondary set of function nodes are displayed in the display window in respective groups (e.g., page 1-2, palette Function with respective groups such as Time & Dialog File I/O, Instrument I/O, Application Control).

e) Dependent claim 11 (Remarks, page 7):

The examiner respectfully disagrees with Applicants' assertions. LabVIEW explicitly teaches:

in displaying the primary set of function nodes and the secondary set of function nodes in the display window in respective groups (e.g., pages 12-1 to 12-3, in Application Control palette, functions Call By Reference Node, Call Chain, Close Application or VI Reference, Invoke Node ... in respective group; page 10-1, Time and Dialog function nodes in respective group),

the primary set of function nodes is displayed in a first column in the display window and the secondary set of function nodes is displayed in a second column in the display window (e.g., page 1-2, each Application Control functions, Time & Dialog File I/O, Instrument I/O (each primary set of function nodes) displayed in different columns in palette Functions of LabVIEW).

In conclusion, the examiner respectfully maintains ground of rejection over claims 1-18 and 26-28.

Claim Rejections – 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-18 and 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by LabVIEW '98 (art of record, "LabView Function and VI Reference Manual", published January 1998).

Claim 1:

LabVIEW '98 discloses *a computer accessible memory medium comprising program instructions, wherein the program instructions are executable by a processor to implement:*

displaying a palette (e.g., page 1-2, Functions Palette),

including a display window comprising a plurality of graphical program nodes for use in a graphical program (e.g., pages 1-2 to 1-7, page 12-6),

wherein each graphical program node comprises an icon and program code (e.g., page 10-2, pages 2-4 to 2-6, 12-1 to 12-3, function nodes comprise icons and program code; pages 12-5, property nodes comprise icons and program code, page 33-19)

wherein each graphical program node is represented by the graphical program node's respective icon in the palette (e.g., page 13-1) and

is selectable from the palette for inclusion in the graphical program (e.g., page 33-19, pages 14-1 to 14-3);

wherein the plurality of graphical program nodes comprise a hierarchy of graphical program nodes (e.g., page 1-2, pages 33-1 and 33-19), wherein said hierarchy comprises:

a first plurality of function nodes displayed in the display window (e.g., page 12-1, select Functions>> Application Control → Application Control Functions (plurality of function nodes) displayed; page 33-1, select Functions>> Instrument I/O>> VISA → page 33-2, Event Handling Functions / Serial Functions (plurality of function nodes) displayed),

wherein each function node corresponds to a respective functionality (e.g., pages 1-2, 13-20, 33-5 and 12-1); and

a second plurality of property nodes displayed in the display window (e.g., pages 12-1 and 12-5, property node in Application Control palette; pages 33-1 and 33-19, property node in VISA sub palette; these property nodes displayed in the display window of palette Functions),

wherein each property node corresponds to a respective one of at least a subset of the plurality of function nodes (e.g., pages 33-1 and 33-19, property node corresponds to Application Control functions; pages 12-1 and 12-5, property node corresponds to Instrument I/O VISA functions),

wherein each property node is displayed proximate to said respective one of the at least a subset of the plurality of function nodes (e.g., page 12-1, property node in a sub palette displayed proximate to Application Control functions; pages 33-1 and 33-19, property node in a sub palette displayed proximate to VISA functions).

Claim 2:

The rejection of claim 1 is incorporated. LabVIEW '98 also discloses:

each of the first plurality of function nodes comprises a polymorphic function node; and wherein each polymorphic function node corresponds to a respective generic functionality, wherein each function node is type-switchable between each of a plurality of function node types (e.g., page 2-2 to 2-4), and

wherein each function node type corresponds to a respective specific functionality (e.g., page 2-3 to 2-5, page 14-6).

Claim 3:

The rejection of claim 2 is incorporated. LabVIEW '98 also discloses *each of the first plurality of function nodes has a default function node type, and wherein the default function node type corresponds to a respective default specific functionality for the function node* (e.g., page 1-2 and 33-1).

Claim 4:

The rejection of claim 1 is incorporated. LabVIEW '98 also discloses *the first plurality of function nodes are organized in the display window in accordance with one or more of: order of use in a typical graphical program development session; frequency of use in a typical graphical program development session; or functional relationships among the first plurality of function nodes* (e.g., page 1-2, Functions are classified/displayed as Structures, Instrument I/O, DAG ...; page 33-1, Instrument I/O VISA functions classified/displayed as Event Handling functions or Serial functions).

Claim 5:

The rejection of claim 1 is incorporated. LabVIEW '98 also discloses *the first plurality of function nodes comprises two or more of: a channel creation node; a read node; or a write node* (e.g., page 33-5).

Claim 6:

The rejection of claim 5 is incorporated. LabVIEW '98 also discloses *the first plurality of function nodes further comprises: a wait until done node* (e.g., page 13-20 and 33-11).

Claim 7:

The rejection of claim 5 is incorporated. LabVIEW '98 also discloses (e.g., page 33-4, Easy VISA Read and Easy VISA Serial Write and Read function nodes; page 33-5, Easy VISA Write and Read and Easy VISA Write function nodes; page 33-1, VISA read/write nodes comprise a primary set of Instrument I/O VISA function nodes).

Claim 8:

The rejection of claim 7 is incorporated. LabVIEW '98 also discloses *the first plurality of function nodes further comprises one or more of: a timing node; a triggering node; a start node; a stop node; or a clear node (e.g., page 10-2, 10-6, 10-8, and 12-6).*

Claim 9:

The rejection of claim 8 is incorporated. LabVIEW '98 also discloses:

the one or more of the timing node, the triggering node, the start node, the stop node, and the clear node comprise a secondary set of function nodes (e.g., page 10-2 Timing function node, 12-6, Stop function nodes); and

wherein the primary set of function nodes and the secondary set of function nodes are displayed in the display window in respective groups (e.g., page 1-2, palette Function with respective groups such as Time & Dialog File I/O, Instrument I/O, Application Control).

Claim 10:

The rejection of claim 9 is incorporated. LabVIEW '98 also discloses *in displaying the primary set of function nodes and the secondary set of function nodes in the display window in respective groups, the primary set of function nodes is displayed in a first row in the display window and the secondary set of function nodes is displayed in a second row in the display window (e.g., page 33-1 and 33-19).*

Claim 11:

The rejection of claim 9 is incorporated. LabVIEW '98 also discloses *in displaying the primary set of function nodes and the secondary set of function nodes in the display window in respective groups (e.g., pages 12-1 to 12-3, in Application Control palette, functions Call By Reference Node, Call Chain, Close Application or VI Reference, Invoke Node ... in respective group; page 10-1, Time and Dialog function nodes in respective group),*

the primary set of function nodes is displayed in a first column in the display window and the secondary set of function nodes is displayed in a second column in the display window (e.g., page 1-2, each Application Control functions, Time & Dialog File I/O, Instrument I/O (each primary set of function nodes) displayed in different columns in palette Functions of LabVIEW).

Claim 12:

The rejection of claim 1 is incorporated. LabVIEW '98 also discloses *each of the second plurality of property nodes comprises a function specific property node corresponding to a respective function; and wherein each function specific property node comprises one or more parameters for configuring corresponding attributes for the graphical program (e.g., page 12-5, 1-3 to 1-7).*

Claim 13:

The rejection of claim 12 is incorporated. LabVIEW '98 also discloses *the second plurality of property nodes comprises two or more of: a channel property node; a timing property node; a triggering property node; a read property node; or a write property node (e.g., page 12-5, 33-5, 13-20, 10-6, and 10-8).*

Claim 14:

The rejection of claim 13 is incorporated. LabVIEW '98 also discloses:
*in each property node being displayed proximate to the respective one of the at least a subset of the plurality of function nodes (e.g., page 33-1 to 33-7),
each property node is displayed in one of: a common row with the respective one of the at least a subset of the plurality of function nodes (e.g., page 1-2, 33-19); or
a common column with the respective one of the at least a subset of the plurality of function nodes (e.g., page 14-1, 14-3, 33-1, 33-19).*

Claim 15:

The rejection of claim 1 is incorporated. LabVIEW '98 also discloses:

each function node comprises a function node icon, and wherein the function node icon comprises a first image; wherein each property node comprises a property node icon (e.g., page 12-5 and 33-19) and

wherein the function node icon comprises a second image; and wherein the second image comprises a version of the first image, indicating the correspondence between the property node and the corresponding function node (e.g., page 1-2, 14-1, and 14-3).

Claim 16:

The rejection of claim 1 is incorporated. LabVIEW '98 also discloses *displaying one or more tool icons in the display window, wherein each tool icon represents a respective graphical program development tool, and wherein each tool icon is user-selectable to invoke the respective graphical program development tool (e.g., page 2-2 to 2-4).*

Claim 17:

The rejection of claim 1 is incorporated. LabVIEW '98 also discloses *displaying one or more function palette icons in the display window, wherein each function palette icon represents a respective sub-palette of one or more additional function nodes and/or one or more additional function palettes (e.g., page 1-3 to 1-7, 33-1, and 33-19).*

Claim 18:

The rejection of claim 17 is incorporated. LabVIEW '98 also discloses *the one or more function palette icons are user-selectable to invoke display of one or more of: a palette of function nodes related to advanced device configuration (e.g., page 33-1 to 33-7);*

a palette of function nodes related to advanced task configuration; or a palette of one or more additional sub-palettes comprising miscellaneous advanced function nodes (e.g., page 1-2 to 1-4, 33-1).

Claim 26:

The rejection of claim 1 is incorporated. LabVIEW '98 also discloses:

the first plurality of function nodes comprises a generic read node and a generic write node; and wherein each property node corresponds to one of the generic read node or the generic write node (e.g., page 33-5), and

wherein the second plurality of property nodes comprises one or more read property nodes associated with the generic read node and one or more write property nodes associated with the generic write node (e.g., page 12-1 to 12-3).

Claim 27:

LabVIEW '98 also discloses a method, comprising:

displaying a palette (e.g., page 1-2, 33-1),

including a display window comprising a plurality of graphical program nodes for use in a graphical program (e.g., page 33-19),

wherein each graphical program node comprises an icon (e.g., page 1-2 to 1-7) and

program code (e.g., page 10-2, pages 2-4 to 2-6, 12-1 to 12-3, function nodes comprise icons and program code; pages 12-5, property nodes comprise icons and program code, page 33-19),

wherein each graphical program node is represented by the graphical program node's respective icon in the palette and is selectable from the palette for inclusion in the graphical program (e.g., page 14-6, page 2-2 to 2-4);

wherein the plurality of graphical program nodes comprises: a first plurality of function nodes displayed in the display window (e.g., page 12-1, select Functions>> Application Control → Application Control Functions (plurality of function nodes)

displayed; page 33-1, select Functions>> Instrument I/O>> VISA → page 33-2, Event Handling Functions / Serial Functions (plurality of function nodes) displayed),

wherein each function node corresponds to a respective functionality (e.g., page 12-1 to 12-3); and

a second plurality of property nodes displayed in the display window, wherein each property node corresponds to a respective one of at least a subset of the plurality of function nodes (e.g., pages 12-1 and 12-5, property node in Application Control palette; pages 33-1 and 33-19, property node in VISA sub palette; these property nodes displayed in the display window of palette Functions),

wherein each property node is displayed proximate to said respective one of the at least a subset of the plurality of function nodes (e.g., page 12-1, property node in a sub palette displayed proximate to Application Control functions; pages 33-1 and 33-19, property node in a sub palette displayed proximate to VISA functions); and

including at least one function node of the first plurality of function nodes, and at least one property node of the second plurality of property nodes in a graphical program in response to user input (e.g., page 1-2, 33-1, 33-19).

Claim 28:

LabVIEW '98 also discloses a system for graphical programming, comprising:

a processor; and a memory medium coupled to the processor, wherein the memory medium stores program instructions that are executable by the processor to: display a palette, including a display window comprising a plurality of graphical program nodes for use in a graphical program (e.g., page 1-2),

wherein each graphical program node comprises an icon and program code (e.g., page 10-2, pages 2-4 to 2-6, 12-1 to 12-3, function nodes comprise icons and program code; pages 12-5, property nodes comprise icons and program code, page 33-19),

wherein each graphical program node is represented by the graphical program node's respective icon in the palette and is selectable from the palette for inclusion in the graphical program (e.g., page 2-2 to 2-4);

wherein the plurality of graphical program nodes comprises: a first plurality of function nodes displayed in the display window (e.g., page 12-1, select Functions>> Application Control → Application Control Functions (plurality of function nodes) displayed; page 33-1, select Functions>> Instrument I/O>> VISA → page 33-2, Event Handling Functions / Serial Functions (plurality of function nodes) displayed),

wherein each function node corresponds to a respective functionality (e.g., pages 12-1 and 12-5, property node in Application Control palette; pages 33-1 and 33-19, property node in VISA sub palette; these property nodes displayed in the display window of palette Functions); and

a second plurality of property nodes displayed in the display window, wherein each property node corresponds to a respective one of at least a subset of the plurality of function nodes (e.g., pages 33-1 and 33-19, property node corresponds to Application Control functions; pages 12-1 and 12-5, property node corresponds to Instrument I/O VISA functions),

wherein each property node is displayed proximate to said respective one of the at least a subset of the plurality of function nodes (e.g., page 12-1, property node in a sub palette displayed proximate to Application Control functions; pages 33-1 and 33-19, property node in a sub palette displayed proximate to VISA functions).

Conclusion

7. THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone/fax numbers are (571) 272 8570 and (571) 273 8570, respectively. The examiner can normally be reached on every Tuesday, Thursday, and Friday from 6:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Thuy Dao/
Examiner, Art Unit 2192

/Tuan Q. Dam/
Supervisory Patent Examiner, Art Unit 2192